



State of Utah

DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

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OK

April 17, 2002

TO: Internal File

THRU: Gregg A. Galecki, Reclamation Specialist/Team Lead

FROM: Wayne H. Western, Senior Reclamation Specialist *W H W*

RE: Mathis Lease Incidental Boundary Change, Andalex Resources Inc. Centennial Project Mine, C/007/019-IB02A

SUMMARY:

The Permittee proposes to add 240 acres of fee land to the existing permit. The additional 240 acres consist of fee land commonly called the Mathis Tract and increases the permit area by 4.64%. The coal in the Mathis Tract has overburden ranging from 2,600 feet to 2,900 feet. The mine plan for the Mathis Tract involves the acquiring additional State and Federal leases. The Division will evaluate the mine plan on the assumption that the Permittee acquires the State and Federal leases. If they do not then the Division will require that the Permittee modify the mine plan.

TECHNICAL ANALYSIS:

ENVIRONMENTAL RESOURCE INFORMATION

PERMIT AREA

Regulatory Requirements: 30 CFR 783.12; R645-301-521.

Analysis:

The Permittee proposes to add 240 acres to their existing permit area, which will increase the acreage from 5175 acres to 5415 acres. The 240-acre incidental boundary change is called the Mathis lease.

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The Mathis lease is located in the southern part of Section 36, Township 12 South, Range 10 East. The location of the Mathis lease is shown on several maps including Plate 4 Centennial Project Leases.

Findings:

The Permittee has met the minimum requirements of this section of the regulations.

MAPS, PLANS, AND CROSS SECTIONS OF RESOURCE INFORMATION

Regulatory Reference: 30 CFR 783.24, 783.25; R645-301-323, -301-411, -301-521, -301-622, -301-722, -301-731.

Analysis:

Affected Area Boundary Maps

The Division usually considers the affected area to be the same as the permit area. None of the maps that were submitted with the IBC states specifically what the permit boundaries are. While several maps do show boundaries that appear to be the permit boundaries, none specifically state so.

The Division needs the permit boundaries to be clearly identified. This is important not only when the Division's staff reviews the permit but also when others review the MRP.

The legal description of the Mathis Lease is given in Section R645-301-114 of the IBC application.

Existing Structures and Facilities Maps

The Permittee did not include a map that shows any existing structures or facilities in the Mathis Tract. To avoid confusion the Permittee must state if any existing structures exist in the Mathis Tract.

Existing Surface Configuration Maps

The Permittee included several maps that show the topography for the Mathis lease. Plate I shows the contours that appear to be based on USGS topographic maps. Because no surface facilities will be constructed and the only expected surface disturbance is subsidence detailed pre-mining, operational and post-mining topographic maps are not needed. The contour lines from the USGS are adequate to show the existing surface topography.

Mine Workings Maps

Plate 29, Isopachs, Current Mining, Mining Projections, Cover, Drillhole Locations, shows the past, present and proposed mine workings. The proposed mine workings are based on the assumption that both Federal and State leases will be acquired.

Permit Area Boundary Maps

The Division usually considers the affected area to be the same as the permit area. None of the maps that were submitted with the IBC states specifically what the permit boundaries are. While several maps do show boundaries that appear to be the permit boundaries, none specifically state so.

The legal description of the Mathis Lease is given in Section R645-301-114 of the application.

Surface and Subsurface Ownership Maps

Plate 2 and Plate 3 show surface and mineral ownership respectfully.

Surface and subsurface manmade features maps

The Permittee did not submit a map that is specifically labeled surface and subsurface manmade features map. Plate 1, Centennial Project General Location Map, show the roads and power lines that are in or near the permit boundary.

Contour Maps

The Permittee included several maps that show the topography for the Mathis lease. Plate I shows the contours that appear to be based on USGS topographic maps. Because no surface facilities will be constructed and the only expected surface disturbance is subsidence detailed pre-mining, operational and post-mining topographic maps are not needed.

Findings:

The information provided in the proposed amendment is not considered adequate to meet the requirements of this section. Before approval, the Permittee must provide the following in accordance with:

R645-301-121.300, The Permittee needs label the permit boundaries on the maps that have been submitted. While markings are shown that seem to depict the permit boundaries, the markings are not identified in the map legend. The Division recommends that the Permittee submit a permit boundary map. That map will be used to answer all question about permit boundaries.

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R645-301-521.120 and R645-301-521.190, The Permittee must show all manmade surface and subsurface features that are located in or around the Mathis Tract. If none exist then the Permittee must state so in the text. Note: the Division recommends that the Permittee also include information for the proposed Federal and State leases. That information will speed up the permitting process for those leases.

OPERATION PLAN

MINING OPERATIONS AND FACILITIES

Regulatory Reference: 30 CFR 784.2, 784.11; R645-301-231, -301-526, -301-528.

Analysis:

Type and Method of Mining Operations

Of the 2.3 million tons of coal in the Mathis Tract much of the coal will be left as part of barrier pillars according to the approved mine plan. The panel-barrier-panel mine design is needed because of the 2,600 feet to 2,900 feet of over burden and the massive sandstone formations above the coal. The barriers pillars are needed to prevent massive caving. Most mine usually mine only to 2,500 feet of over burden. Therefore, the Permittee is recovering coal that many operators would leave behind.

Facilities and Structures

The Permittee does not propose to build any new surface facilities in connection with the Mathis Tract.

Findings:

The Permittee has met the minimum requirements for this section of the regulations.

EXISTING STRUCTURES:

Regulatory Reference: 30 CFR 784.12; R645-301-526.

Analysis:

The Permittee did not address this issue. To avoid confusion the Permittee must state if there are any existing structures in the Mathis Tract.

Findings:

The information provided in the proposed amendment is not considered adequate to meet the requirements of this section. Before approval, the Permittee must provide the following in accordance with:

R645-301-526.110, The Permittee must list any structures located in the Mathis Tract. If no structures exist then the Permittee must state so in the text of the IBC application.

RELOCATION OR USE OF PUBLIC ROADS

Regulatory Reference: 30 CFR 784.18; R645-301-521, -301-526.

Analysis:

The Permittee will not relocate or use any roads in the Mathis Tract. Should any road in the Mathis Tract be damaged the Permittee would be required to mitigate the damage.

Findings:

The Permittee has met the minimum requirements for this section of the regulations.

COAL RECOVERY

Regulatory Reference: 30 CFR 817.59; R645-301-522.

Analysis:

The Mathis Tract is part of a larger section that the Permittee proposes to mine. The coal in the Mathis Tract is located under 2,600 feet to 2,900 feet of cover. Due to the deep cover and the massive sandstone formations above the coal, the Permittee will have to leave large barrier pillars. The design is similar to that already in use.

Most operators usually do not mine coal when the cover is greater than 2,500 feet. Therefore, any coal that the Permittee can recover is coal that usually not mined. The Division has reviewed the general mining plan and determined that the Permittee is maximizing coal recovery.

Findings:

The Permittee has met the minimum requirements for this section of the regulations.

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SUBSIDENCE CONTROL PLAN

Regulatory Reference: 30 CFR 784.20, 817.121, 817.122; R645-301-521, -301-525, -301-724.

Analysis:

Renewable Resources Survey

The Permittee did not conduct a renewable resource survey specifically for the Mathis Tract. The current renewable resource survey identified water, grazing and wildlife habitat as renewable resources in the permit area.

Because the Permittee did not show that the Mathis Tract had no renewable resources, the Division assumes that they exist. Therefore, the Permittee must have a subsidence control plan for the Mathis Tract.

Subsidence control Plan

The subsidence control plan for the Mathis Tract is in the IBC PHC to Appendix L. The plan is as follows:

Because of the support of the unmined coal barriers and the structural strength of the overlying massive sandstone units, subsidence at the land surface is minimal to non-existent. It has been the experience at the Tower Mine that in areas where the overburden exceeds approximately 1,000 feet, no measurable subsidence at the land surface occurs (Tower Mine subsidence data, 2002.) Mining in the 240-acre IBC area will occur under more than 2,600 feet of cover. Thus, no subsidence in the IBC area is anticipated.

The 2000 annual subsidence survey showed that not measurable subsidence occurred at the Centennial project. Because of the deep cover and the barrier pillars the Division concerns with the general finding of no measurable subsidence.

Performance Standards for Subsidence control

The Permittee is required to mitigate any subsidence damage that should occur.

Notification

The Permittee is required to notify all surface owners 6 months before mining.

Findings:

The Permittee has met the minimum requirements of this section of the regulations.

ROAD SYSTEMS AND OTHER TRANSPORTATION FACILITIES

Regulatory Reference: 30 CFR Sec. 784.24, 817.150, 817.151; R645-301-521, -301-527, -301-534, -301-732.

Analysis:

No roads will be constructed as part of the Mathis Tract IBC.

Findings:

The Permittee has met the minimum requirements of this section of the regulations.

SUPPORT FACILITIES AND UTILITY INSTALLATIONS

Regulatory Reference: 30 CFR Sec. 784.30, 817.180, 817.181; R645-301-526.

Analysis:

No additional support facilities or utilities will be installed as part of the Mathis Tract.

Findings:

The Permittee has met the minimum requirements of this section of the regulations.

MAPS, PLANS, AND CROSS SECTIONS OF MINING OPERATIONS

Regulatory Reference: 30 CFR Sec. 784.23; R645-301-512, -301-521, -301-542, -301-632, -301-731, -302-323.

Analysis:

Affected area maps

The Division usually considers the affected area to be the same as the permit area. None of the maps that were submitted with the IBC states specifically what the permit boundaries are. While several maps do show boundaries that appear to be the permit boundaries, none specially state so.

Mining facilities maps

No new mine facilities will be built because of the Mathis Tract.

Mine workings maps

Plate 29, Isopachs, Current Mining, Mining Projections, Cover, Drillhole Location, show

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the location of the current and proposed mine workings. The information on the Plate 29 is adequate for the Division to determine the general mine plan. However, Plate 29 does not show the timing and sequence of the mine plan. The Division needs that information to evaluate future mine plans.

Monitoring and sample location maps

Findings:

The information provided in the proposed amendment is not considered adequate to meet the requirements of this section. Before approval, the Permittee must provide the following in accordance with:

R645-301-121.300, The Permittee needs label the permit boundaries on the maps that have been submitted. While markings are shown that seem to depict the permit boundaries, the markings are not identified in the map legend. The Division recommends that the Permittee submit a permit boundary map. That map will be used to answer all question about permit boundaries.

R645-301-521.141, The Permittee needs to show the timing and sequence of Mathis Tract and the proposed Federal and State leases.

RECLAMATION PLAN

APPROXIMATE ORIGINAL CONTOUR RESTORATION

Regulatory Reference: 30 CFR Sec. 784.15, 785.16, 817.102, 817.107, 817.133; R645-301-234, -301-270, -301-271, -301-412, -301-413, -301-512, -301-531, -301-533, -301-553, -301-536, -301-542, -301-731, -301-732, -301-733, -301-764.

Analysis:

No additional surface disturbance will take place. Therefore, no change to the AOC plan is needed.

Findings:

The Permittee has met the minimum requirements of this section of the regulations.

BACKFILLING AND GRADING

Regulatory Reference: 30 CFR Sec. 785.15, 817.102, 817.107; R645-301-234, -301-537, -301-552, -301-553, -302-230, -302-231, -302-232, -302-233.

Analysis:

No additional surface disturbance will take place. Therefore, no change to the AOC plan is needed.

Findings:

The Permittee has met the minimum requirements of this section of the regulations.

MAPS, PLANS, AND CROSS SECTIONS OF RECLAMATION OPERATIONS

Regulatory Reference: 30 CFR Sec. 784.23; R645-301-323, -301-512, -301-521, -301-542, -301-632, -301-731.

Analysis:

Affected area boundary maps

The Division usually considers the affected area to be the same as the permit area. None of the maps that were submitted with the IBC states specifically what the permit boundaries are. While several maps do show boundaries that appear to be the permit boundaries, none specially state so.

Bonded area map

There will be no changes to the disturbed area.

Findings:

The information provided in the proposed amendment is not considered adequate to meet the requirements of this section. Before approval, the Permittee must provide the following in accordance with:

R645-301-121.300, The Permittee needs label the permit boundaries on the maps that have been submitted. While markings are shown that seem to depict the permit boundaries, the markings are not identified in the map legend. The Division recommends that the Permittee submit a permit boundary map. That map will be used to answer all question about permit boundaries.

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BONDING AND INSURANCE REQUIREMENTS

Regulatory Reference: 30 CFR Sec. 800; R645-301-800, et seq.

Analysis:

General

Determination of bond amount

Because no new surface disturbance will take place, no bond adjustment will occur at this time.

Findings:

The Permittee has met the minimum requirements of this section of the regulations.

RECCOMENDATIONS:

The Division should deny the incidental boundary change until the Permittee has satisfied all the above-mentioned deficiencies.

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